Over the last years, the European Conference on Smart Objects, Systems and Technologies (former European Workshop on Smart Objects) has become a central platform in Europe for personal networking and information exchange in the field of RFID technologies and applications.

Conference SCOPE

While the networking of objects for the purpose of data collection and distributed control is no longer a recent phenomenon, the sheer number of things that are networked to information systems has dramatically risen. Today, the Internet is increasingly extended to all kinds of physical assets: product components, finished products, logistic units, equipment, documents, vehicles, buildings and electronic meters as well as embedded systems of all kind. Mature industries, like the energy or automotive are in euphoric mood and accordingly, we see enormous research and technological development activity: For instance, Auto-ID technologies such as RFID are being increasingly combined with data storage capacity and sensors or other communication devices that provide real-time data such as position, temperature, pressure, vibrations etc. These special-purpose computer systems are able to sense information from the real world or perform actions upon it and are also able to communicate with other networked computer systems.

Accepted papers will be published in the IEEE Xplore® Digital Library.

Conference Venue

Boltzmannstr. 15, 85748 Munich, Germany
Local organizer: RFID-Anwenderzentrum München
at Technische Universität München, Faculty of Mechanical Engineering

Conference Fee / Registration

The conference fee:	for participants	250.00 €
	for speakers	225.00 €
	for students	150.00 €

Conference fee includes: Conference attendance for both days, proceedings (CD-ROM), coffee breaks, lunch, social event.

For online registration please visit our website. You will be able to find continuously updated information on **www.smart-systech.eu**.
For further information feel free to contact **info@smart-systech.eu**

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SMART SysTech

PROGRAM

Smart SysTech 2017

European Conference on Smart Objects, Systems and Technologies

20.06. – 21.06.2017

Munich, Germany
RFID-Application Center Munich
at the Technical University of Munich

IEEE

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Tuesday, 20.06.2017

08:00	Registration & Welcome
10:00	Conference Opening Prof. Erwin Biebl, Associate Professorship of Very High Frequency Technology, TUM, Germany
	Session 1: Positioning & Localization
11:00	Hardware Design of Receivers for Combined Localization and Wireless Synchronization Hans-Martin Troeger, FAU, Germany
11:30	Designing a Basic IR-UWB-RTLS - Raw-data position estimation utilizing TWR Simon Tewes, HS Bochum, Germany
12:00	Ultra-Low-Power Quantized-RSSI-based Localization Using Wake-Up Receivers Toni Babik, Fraunhofer IIS, Germany
12:30	Lunch
13:30	**Keynote #1** DI Josef Preishuber-Pflügl, Executive Vice-President, CTO, Business Manager RFID+NFC
	Session 2: Smart Object Manufacturing Technologies
14:30	Communication with Passive RFID Sensor Tags during Injection Molding of Medical Plastic Parts Matthias Zeppenfeld, TUM, Germany
15:00	SHF RFID System for Automatic Process Optimization with Intelligent Tools Peter Kuhn, Fraunhofer IMS, Germany
15:30	Coffee Break
	Session 3: Antenna Design & Air Interface
16:00	Optimization of opposing phased looked loop parameters in UHF RFID Systems Frederic Meyer, Fraunhofer IMS, Germany
16:30	A multi-purpose UHF RFID Tag Emulator for Communication Protocols Testing Andres Garcia, University of Castilla - La Mancha, Spain
16:00	Tour @ RFID-Application Center Munich
19:00	Social Event @ Bräustüberl Weihenstephan

Wednesday, 21.06.2017

Registration & Welcome	08:00
Session 3: RFID & NFC Technologies	
A Carrier Inband Backscatter Technology for Radio Frequency Identification Systems Philip Schmidt, Fraunhofer IMS, Germany	09:00
Experimental Analysis of an RFID Tunnel Gate Daniel Grefkes, Otto von Guericke University Magdeburg, Germany	09:30
Coffee Break	10:00
Keynote #2 Prof. Bernd Bruegge, Chair for Applied Software Engineering, TUM, Germany	10:30
Session 4: Propagation & Channel Modeling	
Design of Autonomous Base Stations for Low Power Wide Area (LPWA) Communication Michael Schadhauser, FAU, Germany	11:30
Empirical Study on Implicit Polarization Diversity and Space Diversity for Short Range Indoor-to-Outdoor Radio Links below 1 GHz Sebastian Rauh, FAU, Germany	12:00
Lunch	12:30
Session 5: Manufacturing Control, Industrial Process Automation	
Real-Time Support During a Logistic Process Using Smart Gloves Constantin Scheuermann, TUM, Germany	13:30
Real Time Decision Support with Reinforcement Learning for Dynamic Flowshop Scheduling Jinzhi Wang, Stanford University, USA	14:00
Investigation of Transmission Techniques for an Application in a Contactless High Speed Data Link Gopinathan Ranganathan, Fraunhofer IMS, Germany	14:30
Coffee Break	15:00
Session 6: Antenna Design & Air Interface	
Optimization of opposing phased looked loop parameters in UHF RFID Systems Frederic Meyer, Fraunhofer IMS, Germany	15:30
A multi-purpose UHF RFID Tag Emulator for Communication Protocols Testing Andres Garcia, University of Castilla - La Mancha, Spain	16:00
Conference End	16:30